

CHICAGO NEUROLOGICAL SOCIETY.

April 3, 1901.

Dr. Hugh T. Patrick in the chair.

A joint meeting for the discussion of the subject of epilepsy was held with the Chicago Medical Society.

THE DEFINITION, PATHOLOGY AND SYMPTOMATOLOGY OF EPILEPSY.

Dr. Elbert Wing read a paper on this subject. After a discussion of the various definitions of epilepsy, the following conclusions were drawn:

First, That impairment or loss of consciousness is the fundamental phenomenon in a paroxysm of epilepsy.

Second, That convulsions of a purposeless type may, or may not, accompany the disturbance of consciousness.

Third, These phenomena must not be due to active brain disease, blood states, reflex irritation, or primary failure of the heart's action; that is to say, it is possible to distinguish attacks of idiopathic epilepsy from attacks which closely simulate epilepsy, but which occur in connection with other diseases.

Dr. Wing discussed the symptomatology under two heads, a first and second stage. The first stage included the general disturbance of health and the various forms of auræ. The second stage was divided into the period of convulsions and that of post-epileptic coma.

Of the minor forms of epilepsy, or petit mal, there is every variety from a momentary arrest of consciousness to the varied phenomena of double consciousness. It is not a matter of great consequence whether a given symptom is called an aura, or a so-called psychic equivalent constitutes the entire seizure.

Mention was made of the fact that migraine is supposed to have a close relation to epilepsy. Krafft-Ebing's statement is generally accepted, namely, "I do not know a single case in which simple migraine could be clinically related to epilepsy."

Under the head of the pathological histology of epilepsy, Dr. Wing made mention of the claim of Chaslin and Féré that a peculiar cortical gliosis is characteristic of epilepsy. Bevan-Lewis claims characteristic vacuolation and degeneration of the large cells of the second layer. Kazowski and Van Gieson have recently confirmed both claims.

Most of those who deny the significance of these findings are not histologists. Ohlmacher has found a persistent thymus and enlarged lymphic glands. In discussing the general pathology the speaker made mention of the fact that histological changes may increase irritability and make the transmission of the nerve force uncertain and irregular. The perversion of some secretions, *e.g.*, that of the thymus, may both induce these histologic changes and excite the perverted functional activity which constitutes the paroxysm of epilepsy. Many central and peripheral irritant agents from the toxins to phimosis may also excite the attacks.

Whether an attack shall be one of grand mal, ordinary petit mal, or of double consciousness, depends more upon the site of the cerebral lesion than upon the nature of the exciting cause. If the action of the Rolandic area predominates, the fit is a major attack; if the higher centers are most active, it is somnambulistic.

Dr. Harold N. Moyer spoke of the diagnosis and varieties of epilepsy as ordinarily recognized. Epilepsy is easily identified when the convulsive attack is typical. Unfortunately the family physician often, and the consultant almost invariably, relies upon the description of people who are not physicians for the sequence of events in the seizure. Epilepsy is a symptom-complex, but unlike chorea and other symptomatic disorders of the nervous system, any of the features which make up the attack may be absent in a particular case. The definition of epilepsy by Donath seems to be as satisfactory as any so far proposed: "An abnormal excitement of the cerebral cortex which increases suddenly, is periodical in its manifestations, has a typical course and disappears rapidly. Whether the attack occurs without unconsciousness and amnesia, depends upon the strength and extent of the irritation." The speaker made mention of the fact that grand mal and petit mal are but gradations of the same condition. Jacksonian epilepsy is not clearly demarkated from other forms, but it is commonly understood to mean those attacks which begin in a limited area of the cortex and extend by continuity. The greatest difficulty in the diagnosis of epilepsy is caused by the so-called equivalent, which may be simply a psychical state marked by automatic acts, or alterations in the emotional or dream states. The so-called *auræ* consist in alterations in the sensory perceptions. Epileptiform seizures which occur in general paralysis of the insane, offer very little difficulty in diagnosis, as the signs of somatic disturbance are usually pronounced. Uremic convulsions may occasionally present every symptom found in the epileptic type.

A very unfortunate combination of words is that known as hysterio-epilepsy. These are cases of hysteria and not epilepsy. They are distinguished from true epileptic attacks by the absence of an initial cry, by the movements being at least coördinate if not purposive in character, by the tongue not being bitten, and the patients not injuring themselves.

In conclusion, emphasis was laid upon the importance of the early recognition of epilepsy. In too many instances the family physician shrinks from the diagnosis, and not infrequently the family are advised that a single convulsion, even though it may have all the epi-

leptic characters, is due to a disturbance of the stomach, or constipation, or other trivial cause, or if it occurs in a child, that the condition will be outgrown. This leads to a false sense of security and to a failure of early treatment in this disease at a time when it is curable.

Dr. Sanger Brown spoke of the hereditary, mental and allied states, including psychical epilepsy. Heredity may be divided into similar and dissimilar. Similar heredity implies the existence of epilepsy in ascendants, while dissimilar heredity refers to such ancestral diseases as insanity and imbecility. Authors do not agree as to what disease should be included in the list of dissimilar hereditary influences. Some include tuberculosis, migraine and hysteria. All agree that insanity and imbecility are by far the most important factors. The speaker referred to similar heredity as more often transmitted through the mother, and that the heritage prefers the sex of the parent from which it was derived.

The psychic or mental manifestations were divided into those momentarily preceding or terminating in other phenomena, those extending over a period ranging from a few minutes to a few days prior to the seizure, those which alone comprise the individual attack, and those which are the result of the fits either momentarily or remotely, and finally, a class of cases in which the mental disease or disorder is of such a nature that it might be more properly regarded as an association with, rather than an expression of, epilepsy. Of the first class, the most common are those which momentarily precede the fit, and fairly constitute the mental or psychic aura. Dr. Brown referred to cases where a familiar environment seemed strange, or again, where the surroundings seemed a repetition, or at least, peculiarly familiar. Other conditions were mentioned such as vague fear, confusion, anger, revenge, joy amounting sometimes almost to a mental or psychic orgasm. These changes which precede the seizure for a variable period are properly regarded as premonitions. They commonly consist of marked irritability, depression, violent explosions of temper, indecency, untruthfulness, or a sense of mental exhilaration and joyousness, rapidly progressing to maniacal confusion and frenzy. Doubtless transitory frenzy might constitute a valid defence for homicide if the defendant were known to suffer from epilepsy, whether the frenzy had been previously known to have been related to the fit in point of time or not.

Dr. Daniel R. Brower discussed the treatment of epilepsy. Especial stress was laid upon the prophylaxis, since epileptics are well known to have unstable nervous systems. They should be relieved of all mental and physical strain during adolescence. Every attention to hygiene should be given, including particular attention to all forms of excretion. Bromides were mentioned as holding the first rank in treatment, but a word of caution not to produce bromism was given. When the bromides fail to stop the seizure the speaker advised the additional use of chloral at bedtime. Reference was made to acetanilid as an adjuvant to the bromides. The speaker opposed the use of the opium-bromide treatment, and strongly favored the withdrawal of salt. Attention to intestinal antiseptics and to blood conditions as they arose, was earnestly advised. If epilepsy is essentially a disease of cell bodies, of cortical neurones, all surgical operation are unscientific. The colony system is the highest ideal for the treatment of these unfortunates. The proof of this is overwhelming in results obtained both at home and abroad.

Dr. Maximilian Herzog spoke of the general pathology and

special histopathology of epilepsy, rehearsing the various theories and hypotheses which have been advanced concerning this affection.

Dr. Sydney Kuh said that in his hands the withdrawal of salt was negative entirely in its effect upon epilepsy. He agreed with Dr. Brower as to the opium-bromide treatment, and favored the bromide of strontium.

Dr. Jacob Frank spoke briefly upon the surgical treatment of epilepsy, emphasizing the necessity for thorough exploration of the skull if any operation were attempted.

Dr. Henry Gradle dwelt upon reflex epilepsy of peripheral origin, and mentioned two or three interesting cases.

Dr. Frederick Leusman narrated the case of a young man, a confirmed masturbator, in whom epilepsy complicated by hemorrhoids developed. The hemorrhoids were removed, and the vena dorsalis penis exsected for about an inch on each side, with the result of cessation of the epileptic seizures.

Dr. L. Harrison Mettler emphasized the importance of making an early diagnosis.

Dr. Julius Grinker alluded to the prevention of marriage among epileptics. He favored the use of opium and borax in the treatment of selected cases.